Pringles and Optimization

Is the current container the cheapest one for the Pringles company? Does the cylinder need to have other dimensions?

Complete these steps to help you answer these questions. \*Note: I would check your work with me after each step. The numbers can get tricky.

1. Find the volume of the Pringles can in centimeters. Round to the nearest whole number. (2 pts)

2. Write the equations needed for optimization. Note: You want the current volume to stay the same. (2 pts)

3. Use calculus to find the radius and height. Round to the nearest hundredth. (5 pts)

4. Explain why Pringles would use their current dimensions and not the ideal ones you found. (Give 2 possible reasons.) (3 pts)

5. Explain why knowing the process of optimization is important. Write a couple sentences (3 pts)